

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Substitute for Form 1649A/PTO

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

*(Use as many sheets as necessary)*

Shan

1

10

Complete & Known

Application Number	10/730,747
Filing Date	12/08/2003
First Named Inventor	Robert M. Koehl
Art Unit	3746
Examiner Name	Vikansha S. Dwivedi
Attorney Docket Number	105196 012000

## U. S. PATENT DOCUMENTS

## FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> "Number <sup>4</sup> "Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Type <sup>6</sup>
		GB2124304	06/1983	Grundfos		Y
		FR 2703409	10/1994	Seim		Y
		EP 0314249	05/1989	Shell		N
		JP 5010270	01/1993	Ebara Corp.		Y
		EP 0709575	05/1996	Franklin Electric		N

**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \*Applicant's unique citation designation number (optional). \*See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. \*Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). \*For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. \*Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST 16 if possible. \*Applicant is to place a check mark here if English language

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete. An average of 1 hour is spent reading the instructions and filling out the form. The cost of this form is \$10.00. Time will vary depending upon the individual case. Any comments or the amount of time you require to complete this form or any suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

American LegalNet, Inc.  
[www.FormsWorkflow.com](http://www.FormsWorkflow.com)

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PXO

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

*(Use as many sheets as necessary)*

Stage

12

1

100

Complete if Known	
Application Number	10/730,747
Filing Date	12/08/2003
First Named Inventor	Robert M. Koehl
Art Unit	3746
Examiner Name	Vikansha S. Dwivedi
Attorney Docket Number	105196 012000

**U. S. PATENT DOCUMENTS**

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> "Number <sup>4</sup> "Kind Code <sup>5</sup> (if known)				
		EP 0735273	10/1996	Wilo		Y
		DE 19645129	05/1998	ABB		Y
		EP 0978657	02/2000	Ebara Corp.		N
		WO 98/04835	02/1998	Gebr. Becker		Y
		DE 10231773	02/2004	Danfoss		Y

Examiner  
Signature

Date Considered

"EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 'Applicant's unique citation designation number (optional): See 'Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.4. Enter Office that issued the document, by the two-letter code (WIPO Standard ST 3)." For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 'Kind of document by the appropriate symbol as indicated on the document under WIPO Standard ST 16 if possible.' 'Applicant is to place a check mark here if English language Translation is attached.'

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality as governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments or the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

American LegalNet, Inc.  
[www.FormsWorkflow.com](http://www.FormsWorkflow.com)

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /VSD/

PTO/SB/08a (01-08)

Approved for use through 03/31/2008. OMB 0651-0031  
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Substitute for form 1419A MTO

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

6

3

二三

4

*Complete if Known*

Application Number	10/730,747
Filing Date	12/08/2003
First Named Inventor	Robert M. Koehl
Art Unit	3746
Examiner Name	Vikansha S. Dwivedi
Attorney/Agent Number	105106-012000

Attorney Docket Number 105196.012000

**U. S. PATENT DOCUMENTS**

## FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> "Number <sup>4</sup> " "Kind Code <sup>5</sup> " (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		DE 19938490	04/2005	Danfoss	V
		WO 01/47099	06/2001	Danfoss	N
		WO 2004/006416	01/2004	Danfoss	N
		WO 2004/088694	10/2004	Danfoss	N
		WO 2006/069568	07/2006	Danfoss	N

**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and note reason. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). "See Kind Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 904.04." Enter Office that issued the document, by the two-letter code (WIPO Standard ST). "For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document." Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. \*Applicant is to place a check mark here if English language Translation is attached.

TRANSITION attached.  
The following information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is required by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments or suggestions on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

American LegalNet, Inc.  
[www.FormsWorkflow.com](http://www.FormsWorkflow.com)

Under the Paperwork Reduction Act of 1995 no Persons are required to respond to a collection of information unless it contains a valid OMR control number.

Substitute for form 1449B/PTO				<i>Complete if Known</i>
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				
(Use as many sheets as necessary)				
Sheet	4	of	4	Attorney Docket Number
				105196.012000

## NON-PATENT LITERATURE DOCUMENTS

Examiner Signature	/Vikansha Dwivedi/	Date Completed	02/12/2009
-----------------------	--------------------	-------------------	------------

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEE "SENDING COMMENTS" ON PAGE 2.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH / MSD/